Kansas Administrative Regulations

Department of Health and Environment

Article 35.—Radiation—Part 7. Special Requirements for Industrial Radiographic Operations.

28-35-279. Leak testing, repair, tagging, opening, modification, and replacement of sealed sources.

(a) The replacement of any sealed source fastened to, or contained in, a radiographic exposure device, leak testing, repair, tagging, opening, and any other action involving a sealed source shall be performed only by persons specifically authorized to do so by the department, the United States nuclear regulatory commission, or an agreement state.

(b) Each sealed source shall be tested for leakage at intervals not to exceed six months. In the absence of a certificate from a transferor that a leak test has been made within the six-month period before transfer, the sealed source shall not be put into use until leak tested.

(c) The leak test shall be capable of detecting the presence of 0.005 microcuries of removable contamination. Leak tests shall be performed by wiping appropriate accessible surfaces and measuring the level of transferred contamination on the wipes. Records of leak test results shall be kept in units of microcuries and maintained for two years.

(d) If any leak test reveals the presence of 0.005 microcuries or more of removable radioactive material, the sealed source shall be considered to be leaking. The licensee shall immediately withdraw the equipment involved from use and shall cause the equipment to be decontaminated and repaired, or to be disposed of, in accordance with these regulations. Within five days after obtaining results of any leak test indicating a leaking source, the licensee shall file a report with the department describing the equipment involved, the test results, and the corrective action taken, if any.

(e)(1) Each exposure device using depleted uranium (DU) shielding and an S-tube configuration shall be tested for DU contamination at least each 12 months. The test

shall be capable of detecting the presence of 0.005 microcuries of radioactive material on the test sample and shall be performed by a person specifically authorized to perform the test by the department, the nuclear regulatory commission, or another agreement state. The records of each DU contamination test shall be retained for two years.

(2) If the test reveals the presence of DU contamination, the exposure device shall be removed from use until an evaluation of any degeneration of the S-tube is made. If the evaluation reveals that the S-tube is worn through, the device shall not be used again. DU-shielded devices shall not be required to be tested for DU contamination while in storage and not in use. Before using or transferring the device, the device shall be tested for DU contamination if the interval of storage exceeded 12 months. (Authorized by and implementing K.S.A. 48-1607; effective Jan. 1, 1970; amended May 1, 1976; amended, T-85-43, Dec. 19, 1984; amended May 1, 1985; amended Dec. 30, 2005.)

***** Authenticated Kansas Administrative Regulation *****